Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 13
Notebook, N-16-05-10

This notebook was used by Edison during May 1916 for notes on experiments to improve the manufacture of disc records. The entries at the beginning of the book give additional information on experiment 1065E, described in Book No. 12. The subsequent entries pertain to experiments 1077E through1096E; there are also lists of other experiments to be performed. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted, along with the title of the musical selection used in the tests. Also included are notes on "drop tests" in which records were dropped on the blotting pad of Edison's desk to test their fragility. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or Archie D. Hoffman. The front and back covers are labeled "No 13." The pages are unnumbered. Approximately 100 pages have been used.

12	100
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

67150
Acme Co.,
MFG. STATIONERS,
96 JOHN ST.
AND
19 PLATT ST.
NEW YORK.

1065 E May 10th 1916

1522 Blank

4 Fibre
3 Chalk
1 Shellac

First 2 rounds all numbered put away for time tests
May 10/16

700 lbs on the Rubber 600 lbs on the final big press making blank
Printed Two rounds- Hoffmans number for this blank is 1522
Used Standard schedule-
Schedule = Bring to contact needle off pin, When temp reaches 200° fahr put on 850 lbs pressure and hold for 12 min, Cool down Cold. Varnish schedule 3 coats baked one hour after each coat 130° deg fahr Edge. Stand vertical 12 in rack oven has circulation of air, Blank rise at hole reamed flush,

Drop Test.
Dropped flat from heighth of 5 feet on my desk blotter laid on hard floor

#		
1	13 Times	Dropped several edge down but they will not break this way neither will they Chip out
2	7	
3	20 - limit	
4	13	
5	13	
6	8	
7	1	
8	10	They edge OK also number OK-
9	13	
10	5	They buff all right removal of dust improves surface slightly
11	12	
12	10	

Tested Surfaces

Discards	0	These surfaces are fine + as good as moulds will probably give on any blank
dust pass	0	
good	1	
fine	5	
Very good	10	
Very Very good	4	
Tracked	VV- VV- (alt RO) VV- (RO) VV- (RO)	

Varnished by man in music room

1065E Continued.

1522 Standard Sch Press 42	1522 Std Sch Press 42
OK OK	OK OK
OK OK	OK OK
Com OK — Edge 1/16 V	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
Com OK — Veneer 1/16	OK OK
OK OK	Low varnish spot 1/4 Dia Low mould 5
OK OK	OK
OK OK	OK OK
OK OK	OK OK
Spec 005 OK	OK OK
	Spec 010 at edge OK
91%	83%
Jootsie	Jootsie

May 10-1916—

1065 Continued

with so much Chalk we must be careful that our Varnish is not Acid as it will attack the chalk & make CO_2 gas.

After numbering Varnishing and Washing the surfaces have improved Very Much nearly all are "Very V good" and some rated "VVV good"

Eye inspection is all that is required and Mould inspection—

Blanks I measured tonight are a little dished—

3rd Round surfaces fine even without Buffing or washing —

Veneer 3 coats on face of blank is $\frac{1}{1000}$ thick

Soaked 1st Round 1 record which was numbered washed —
Was in water $8\frac{1}{2}$ hours swelled up very bad at Edges + broke sections, but every part of music OK no points or tip holes swelled — The record was very poorly shellaced not shiny — Edge swelled very much more than 1519
Try better Varnishing + retest also get better water proofing

Var in Music room
1522 3rd Dup
42 press

Veneer V Discard
OK
OK
OK
OK
OK
OK
OK
Specs
OK
Specs
Specs
Low varnish
Low Varnish
OK
OK
OK
OK

66%

Tootsie

1065 Varnish in Music R
4th Dup 1522-
Press 42

OK
OK
OK
OK
Spec 050
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
Com OK
Veneer $\frac{1}{16}$
Low spot spec 050

83%

Irish Rose

1065

5th Round

Press 42

OK
OK

Specs start of music
OK

OK
OK

Corn Edge - V 1/8
OK

OK
OK

OK
OK

Specs 1/2" middle music
" 1/2 op

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

88%

Irish Rose

1065

6th Round.

Press 42.

OK
OK

OK
OK

Specs 3" start of music
OK

OK
OK

Low Varnish
OK

OK
OK

Specs 1" area mould removed
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

95%

Irish Rose

7th Round 2 low moulds
Irish Rose = 162
Dream - #65

10th is due to low blank, probably

* taken off -

8th round 4th should be explained

1065 1522

7th Round Press 42

OK OK
OK OK
OK OK
OK OK

Low mould - Dream 3-65 *
OK

Corn OK — 2 edge 1/16 ✓

Specs - 1 chipping H open #7 mould OK
OK

OK OK — pp in end smooth with press

OK OK

Specs Irish Rose #111
Specs mould OK } op.

OK OK

Specs, Irish Rose * #162 low mould
OK

66 2/3 -
X-LM - 83 1/3

1065 - 1522

8th Round Press 41

Specs - 1" scalloped apex end in music 1/2 in music 1/2 smooth point mould OK
OK

OK OK

Specs area 1" x 3" on music at the end, mould OK
OK

Spec
Spec } op both ⅓ Phenomenon + just at start of music

OK OK

bad feed line 1/2 long - also big area
OK Specs in music

Specs - 1/2 scalloped junction smooth point + music towards Label chipping Hope 63
OK

OK
2 Spots - 1/2 right angles to each other - both next to Label - Chauncey 32

OK OK

Spec 1/2 } op A Dream 87 spot
" 1/2 } 1/2" from end music mould 87 only shade low

OK OK

OK OK injury spec in mould
OK

41 2/3

9th Round 1522 Press 42 - Fresh Rose

OK
OK

OK
mould not low
Specs 3/4 area, Center 1/2" in from End music Rosary 14

OK
OK

OK
OK

Streak on smooth at end music FreshR 141 - mould seam flat
OK

OK
OK

Just for today # 28
Spot 1/2 End music mould not low
OK

Spot 3/4 x 1 1/4 last end music - Just for today 63
OK

OK
OK

OK
OK

OK
OK

Discard Var V to feed line Mold Rack - 56
OK

58%

10th Round 1522 press 41

OK
OK

OK
OK

OK
OK

Discard Veneer V $\frac{1}{16}$ from feed line.
OK

OK
OK

Com
OK
Edge V.

Com
OK
Bad puff out at hole thinkcan fix

Com
OK
Veneer V $\frac{1}{16}$

Torn $\frac{1}{4}$ in from start of music
OK

Discard - Crushed Edge bad -
OK

Discard, Veneer V comes within $\frac{1}{8}$" feed line
OK

OK
OK

66% Jootoie

11th Round 1522 press 42 dot 20
Van Oper B night –

Com OK Edge ⅜" in

Specs on Margin
OK

Spot next label 3/4 dia smooth. Mould ok
OK

Label pulled out at Edge & near hole
OK

OK OK

OK OK

Spot 3/4 dia Next label not in Mould
OK

OK OK

OK OK

OK OK

Discard – blank crushed to within 1/8" of feed line but in place
OK

OK OK

58% Irish Rose

11th Round 1522 presses 42 Cal 20
Van Oper B night –

Com Edge 1/8" in
OK

Specs on Margin
OK

Spot next label 3/4 dia smooth. Mould OK
OK

Label pulled out at Edge & near hole
OK

OK
OK

OK
OK

Spot 3/4 dia Next label not in Mould
OK

OK
OK

OK
OK

OK
OK

Discard – blank crushed to within 1/8" of feed lens but in place
OK

OK
OK

58% Irish Rose

Moore Took # 10 Moon defect
to Examine Mould -

12th Round 1522 Cat 20 Press 42

1 OK OK

2 OK OK

3 OK OK

4 OK OK

5 OK OK

6 Low spot - Low mould - small area
OK

7 OK OK

8 OK OK

9 Com Edge 1/8
OK

10 Big spot 5/8 wide follows Edge of label 1/8 space for 3"
to moon shaped
other side shows light area

10

Good Press, 80%

13th Record 1522 Lot 20 -
Var Opr #4 Nights

1 OK OK

2 OK OK

3 OK OK

4 OK OK

5 OK OK

6 Space on last line on must
OK

7 Space Space | op - last 1/2" of music space 1st 1/4 of music

8 OK OK prints but big oval clear narrow label
+ 1/8" from Music on Opposite side
flush + OK but shows only
dura around - Disc OK

9 OK OK

10 OK OK Prints has big oval clear narrow label
just like No 8 — Disc OK

Com OK Veneer - 1/16

OK OK

83%

Footoie

Note 7 Low mould

14th Round 1522 Lot 20 Press 42
Var Ofer # 4 Nights -

1 OK OK

2 OK OK

3 Specs Center of music - thumb pull out to
Specs 1/2" from end of music 3 of 010 - may be pull out

4 OK OK

5 OK OK

6 OK OK

7 Bare spot actual size 1 1/2 in music Low Mould
OK

OK OK — Dust spot in label + little on smooth

OK OK

OK OK

OK OK

OK OK

Inspt Ross

83 o/o

15th Round 1522 Lot 16 —
Press 41 — Var Opr #3 Nights

1 OK OK
2 OK OK
3 OK OK
4 Com OK Veneer V V V 1/16
5 Big OK Area spots — Center of area 5/8" in from end Music mould ok
6 Spots fair. at end of music mould ok
7 OK OK
8 OK OK
9 OK OK
10 OK OK 1/4 spot at Edge of label.
OK OK
OK OK

83%

Tootsie
#2

16th Round 1522 Lat 16-
Press 42 Van Ofr # 3 nights

15 [redacted] Space Space | op at Edge small
6 OK OK
7 OK OK
8 OK OK
9 OK OK
10 OK OK
11 OK OK
12 Com OK Veneer +
12-

87

Lush Rows

1/16 Plywood 1522 lots 18 -
Press 41 - Apr 3 nights

1 OK OK

Discarded Veneer - probably Crushed under

2 OK -

3 OK OK

4 Com OK Veneer 1/16

5 Com OK Veneer 1/8

6 Com OK

7 Com OK Edge 1/16

8 Com OK Veneer

Note 6 Laminated

17th Record 1522 Leaf 18 Ofer 3 nights
Pieces 41

1 Com OK veneer ½
2 OK OK
3 Com OK Edge V
4 OK OK
5 OK OK
6 OK Spot. 5/8 in from End Music · Loose Mould
7 Com OK Edge
8 Com OK Edge
9 Com OK veneer ½
10 OK OK
Discard – Veneer – think cause to crowded Edge
OK
Com OK veneer

83%

Jootoic

18 Rounds

90 defective surfaces

many ok — of the 90

60% are pull outs —

Can edge donuts

1/4" of 1st feed line —

18th 1522 Lot 18 Oper 3 mylar

Press 42 —

7 Low 1/2" in from end music OK

8 OK OK

9 Low spot 2 of them 5/8" in from end music OK

10 OK OK

11 Specs specs / op 1/2" in last part of music

12 OK OK

50%

Trish Rose 18

NOTE

By studying 12 Records under Micro at point where most of our discards take place which is last 5/8 of music + part of smooth part. I find that contrary to supposed poor print that they are perfectly filled - and that the specs are really PULL OUTS I then went up stairs to ask if they had many click To mould at that particular point, The man said yes

that is the point where most of the sticking takes place, + he had kept an account of them

Hereafter I will get this record for each Round

Arrange Card 1 to 12 + have man mark each mould + position,

4 Rounds on 1519 Varnished in Fred Otto Machine, The only defects were puff outs on the mould,

~~19th Round~~

See book 12

1075 E to 1522 blanks
should have been
put here

4 Rounds fired Ills. Varnuly
with Machine —

83% 66% 100% 58%
pull out the whole trouble

Edges turn up a little
all night in water
but not shellac
just dipped

MG

Notes for Experimenting Etc

1= Get black Var jet black & shiny to
Coat pull outs in Label. the solvent one
that dissolves shellac if possible

2= Rotate a numbered record as the
Edge touches in Kerosene, which
should be absorbed. Then shellac over
this. Try Melted Varnishes —
test in water shellacked & not shellacked

3= Buff several discards until a
satisfactory glaze is attained
when OK Buff One round
of moulds & Continuously print
to see if Pull Outs Clap

4 To stop pull outs, Tap moulds
Edgewise in 4 places
to see if it will not prevent
Pull outs.

5= Have 2 men day & night take
rounds at Random from
dif presses & record same as
I have been doing —

This is ok

Peg Racks work ok

Worked ok

Notes Continued

6 = I wonder if knocking out pin moves moulds + breaks side walls -

7 = in 10 hours 1 Baking Rack will gives 90 records in 10 hours
1 Coat Requiring for 16000 Records 177 Racks for 3 Coats 531 "
if any night work, then reduction in number of racks will be in proportion — find number of rack we have?

8 = Fred Off Thy 4 Rounds with the Twins Between,

9 = Arrange for daily report sent to me of the number of 1519 + 1522 Blanks made daily

Notes Continued

10 Have daily report sent me of number of 1519 & 1520 Records Printed daily -

11= Have daily report of the number of new blank making moulds finished daily +

12= Report daily number of Varnishers by day & night.

20th Round 1522 - 3 Coat baked 1300
Press 41. Oil on Kettel

specs - pullOut End music
ok

OK
OK

Pull outs
pull outs } op

Com Veneer 1/8
OK OK

Com Veneer 1/8
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Discard, Edge
ok

OK
OK

75%

91 without PO.

Jostoia

1522

21st Round 42 Pieces

Edge V Edge
OK

Com OK Edge V just clean up 1/16

Com OK Edge V. not out,

OK OK

OK OK

Bad print } not filled – not of Pull out
Bad print }

Big Pull out } of Rut OK OK dont sound
" " "

OK OK

Bare spot
OK veneer crumpled

OK OK

OK OK small pd

Com OK veneer 1/16

66 2/3

75

Irish Rose

22nd Round 41 Press

~~Pull outs~~
Pull outs cumbear
Pull outs
pull outs "
Pull out — "
OK
Pull outs "
OK
Com OK Edge ok within 1/4"
Com OK veneer 1/8 ok
Com OK Edge 1/8 ok
OK OK
Com OK veneer 1/16
OK OK
OK OK
OK OK

66%

Joolsie

23 Rounds 42 pieces -

Pull outs - Sounds
OK
OK
OK

Pull outs
Pull "
Dont Sound OK
OK
OK

Pull out - Dont sound OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK

45

91%

Trust Rose

Hoffman

Output	1519	1522
5-12-16	1125	1128
	1125	1522
5-13-16	1144	950

1077 E Press 42
1st Round

pullouts pullouts | Dis
Pullouts | Dis
OK
Form-Venee ok | Dis
pullout
Pullout End
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

66- (73)

Fresh Press

2nd Round Press 41

OK OK
Bare spot Mid Music
OK
Pullout
OK
OK OK
OK OK
OK OK
pullouts | Dis
OK
OK OK
OK OK
Corn | Edge
ok
OK OK
OK OK

45%

Tostaia

1077 E

1522

Hoffman Make 24 blanks
without the Hammers

Varnish & Print Req
1522 Schedule

Varnish in Music
Room

Thus Days
40 men
20 day 20 night

1522-

24th Round Press 42 —

Pull out — Discard-Cam bear

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Pull out-Discard, spot very little print

Pull out OK

OK
OK

83%

Irish Rose

1522-

24th Round Press 42 —

Pull out — Discard=Coarse

OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK

Pull out-Discard spot very little print
Pull out OK

OK
OK

83%

Irish Rose

1522

25th Round Press 41
Load 2

OK
OK

OK
OK

Veneer — Discard — warping 3/16
OK

Veneer detached — will clean up OK
OK

Com OK Edge V.

OK
OK

OK
OK

Com OK Edge V.

Pull outs — Discard — Sounds
OK

Pull outs — Discard — "
OK

OK
OK

Pull out poor print
OK

58%

66%

Jastoic

26 Round 42
Press

Pullout | Can't hear (OK)
Pullout " (OK)

(OK)
(OK)

Pullout = Don't Sound (OK)
Pullout = (OK)

(OK)
(OK)

(OK)
(OK)

Barespot — Discard
OK

(OK)
(OK)

(OK)
(OK)

Pullout — Don't Sound (OK)
OK

(OK)
(OK)

(OK)
(OK)

Discard — Edge Cracked
OK

58%

(91%)

Irish Rose

27 Round 41 Press —

Com OK Edge ✓

(OK)
(OK)

Com OK veneer $\frac{1}{8}$

Pullout DUE TO OIL
OK near label
mixes with Var
Roller
Discard — Edge — bad pullout

(OK)
(OK)

Pullout
Pullouts } Don't Sound (OK)
(OK)

(OK)
(OK)

(OK)
(OK)

Com OK Edge $\frac{1}{16}$

Com OK veneer $\frac{1}{4}$

(OK)
(OK)

66

(83%)

Tootsie

28th Run. 1522

42 Press

Com OK — Edge Crushed

Faire Spot Discard

OK

OK OK

OK OK

OK OK

OK OK

Com OK — Edge 1/8 ✓ ✓

Com OK — Edge 1/8

OK OK

OK OK

Discard - Veneer

OK

OK OK

83%

Frank Rose

29th 1522

Press 41

pull out Dout Sound 3 Knots — OK OK

OK

OK OK

OK OK

OK OK

OK OK

OK OK

Com OK — Edge 1/8

OK OK

OK OK

Veneer OK — 1/8

Pull out Discard

Veneer OK —

83 -

91

Joe Fiz

30th. 1522 Note

Press 40 Load 1 S

OK OK

Pull out on wood OK OK

OK

OK OK

Edge Discard

OK

Pull out. Discard

" "

Barespot Discard

OK

Pull out } Discard

Pull out

Com OK Pull out - veneer

Veneer - Discard

OK

Veneer Discard

OK

Com OK Edge 1/8 Long

Pull out OK OK OK

33%

50

Dwz check Slow Every Fold

31 — Press 41 Load 2

OK OK

OK OK

OK OK

pull out OK OK OK

OK OK

Com OK Edge 1/8

OK OK

OK OK

OK OK

Pull outs 2 places OK OK OK

OK OK

OK OK

83

100%

Footside

2

32 1522

Press 42 -

OK OK

Pullout Discard
OK

Pullout
Pullout OK OK

Pullout
Pullout Discard

bare spot rim Discard
OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

pullout
" Discard

58% 66%

Fresh Rose

33- 1522

Press 42

OK OK

OK OK

OK OK

Com OK Veneer 1/16

OK OK

OK OK

bare Spot low Var Discard
OK

Pullout
Pullout OK OK

OK OK

OK OK

Com OK Veneer 1/16

Pullout
OK OK OK

75 - 91

Fresh Rose

5-15-16

Hoffmans has

106 Bottom

139 Top plates

He's running 1 leg on 106 but gives no margin to wash

Requires 130 moulds per leg

Press 42-

1 X
2 X
3 X
4 —
5 X
6 X
7 X
8
9
10
11
12

66%

780
139
641

42-
-9-

34- Press 42

Bare spot Discard
OK
OK
OK
OK
OK
OK
OK
Com OK
Veneer 1/16
Pullouts
" "
OK
OK
OK
OK
OK
OK

83%

91

Trash Rose

35- Oiled Moulds AB 5/1

42 Press -

Discard - new label Oil on mould
" " " "
Oil on mould near label
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
Pull out
Pull out
OK
OK

Oil

75

83

Using 5% Sesame in Gasoline -
Dugertit dip in oil + rub quickly over whole oil mould then wipe dry

No advantage

36 Round OIL
Expand
Press 42 Load 2

OK OK
OK pull out big area Discard RO
pull out, (one) Discard
OK
Pull out - (one)
OK
OK OK
Pull out - (one)
OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

66%

Factory

37 — OIL

42 Press
pull out OK
pull out Discard

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
Bare spot Margin
OK
Com OK Edge 1/8
OK OK
pull out, too many sample
OK
pull out
OK
OK OK
OK OK

66%

75

Fresh -

B = 8 Blanks

OK
OK
OK BUT Blank Ckd - pull out load.
1 OK
OK
OK
OK
OK
OK

75%

Jootsie

A = 10 blanks low

OK
OK
OK
OK
Pullout ferro | Dusting OK
OK
Pullout OK
Ferro | ferro | op
OK
OK

70%

OK
80%

Jootsie

1078 E High Tins will do should be made different cut away to get Schedule

1522 blanks Vom by Oles

Machine - Tin Centers all throw - Low Tin 10 mark

A 3.5 cc coat

High Tins mark B

Tins not cut out

10 blank of A 8 blanks of B.

Evidently Tins will do

Think High Tins best

Tits dont choice -

It may be Ferro is a specialty of tins - it may require 1 1/4 @ 1 1/2 Nocero Gelatin Coats baking

Reprints

Press 41

1 OK OK — OK Lightened both OK all

2 pullouts too many snaps Lightening all over inferior too many snaps

3 poor print OK

4 Air — Edge

5 Air — Thin spot Discard OK

6 Bad Print | Dis " "

7 Com OK | Edge + 1/16 — OK Pull thru Lots Idea

8 Pullouts | Discard OK

9 Pullouts | Discard OK

10 pullouts Dis OK

11 OK OK — OK

12 air underneath Dis OK

3 OK 25% OK

Tootsie

2nd Round

41 press —

1 pullouts OK

2 OK OK Too Many snaps out - Diamond breaks the Rice - air Dis

3 OK

4 OK OK OK all over Listens

5 specs " Discard

6 pullouts poor press | Discard

7 OK OK — OK both, Listens

8 snaps " Discard

9 air air | Discard

10 air air "

11 air air "

12 air -

16%

Tootsie

1079E Reprints -

Two rounds. 1522 Prints

Revarnished by Att with Machine - Reg 3 Coats 5.5 CC — baked hour between Each Coat

Trouble is air between first layer & last, it rises up & gives a spot 030 - the diamond Comes along & breaks it

38 Not Ordered

Pieces 41 –

OK
OK
OK
OK
OK
Pull out Loud
OK
Pull out Loud
OK
OK
OK
OK
OK
OK
Pull out, Loud
OK
OK
OK
Pull outs Discard
"
"
OK
OK

66 2/0

Jootaie

39

41 Pieces

OK
OK
OK
OK
OK
OK
OK
OK
OK
Com OK Edge 1/8
OK
OK
Pull out Loud
OK
OK
OK
Com OK veneer 1/8
OK
OK

91 2/0

Jootaie

40

Press 42

OK OK

OK OK

OK OK

Com OK Edge 1/16. v v v

Pull out OK. OK OK

Com OK veneer 1/8

OK OK

OK OK

Barespots - PO OK Discard

OK OK

OK OK

Pullout OK OK OK

75 91

Irish Rose

41 Round 1522

Press 42.

pull out OK OK OK

OK OK

Barespot OK Discard

OK OK

OK OK

Barespot OK Discard

OK OK

OK OK

OK OK

OK OK

OK OK

pull out spaces OK OK OK

Pullouts Pullouts

58. 75

Oiled

42

Press 42

OK OK — 010 of steel hurt mould

OK OK

OK OK

Barespot Discard

OK

OK OK

OK OK

OK OK

Big areas PO — OK OK

OK

OK OK

Low blank or Van

OK

OK OK

OK OK

75% — 83

Frank Rose

Not oiled

43

Press 41

pull out spots veneer — OK OK

Barespot pull outs — ½ Discard

OK OK

OK OK

OK OK

OK OK

pull outs — OK OK

OK

pull outs " " — Dis

OK OK

OK OK

OK OK

OK OK

66% — 83

Jacobsen

42- Not Oiled

Press 41

OK
OK

Pull out | Dis
OK

OK
OK

Bore scratch Dis
Specs

OK
OK

Com Edge V 1/8
OK

OK
OK

OK
OK

OK
OK

pull out
OK

OK
OK

OK
OK

pullout Dis
OK

66 75

Footsie

Reg 43 no oil-

Press 41 Buffs Not Buffed
Note 4411 @ 2-1 4411 2-4
4410-a 1-6 4410 1-21

2+1 1+6 OK OK 4411-10

2x4 1x21 pullouts pullouts Discard

pullouts pullouts Discard

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

pull out " " of Dis Hand ok

OK
OK

OK
OK

75%

Footsie

1080
C Varnish
2nd Round Press 41

Corn OK — Edge 1/8

OK OK

OK OK

OK OK

OK OK

one yellow spec · not heavy · dont break OK OK

air bubble few " " break

bubbles OK · Diamond blks

Bubbles big area " "

" " " "

OK OK

Streak yellow bubbles OK

50%

2" long 3/8 wide at angle — Same Reason for this

NO PULLOUTS

Probably bubbles greatly diminished by a longer bake 3 or 4 hours angle Cast if that works.

Varnish flows out on run of Mould Easy to clean — Mould free of pullouts —

44 1522 Not Oiled
Press 41

OK OK

OK OK

Pullout OK — OK OK

Pullout OK — OK OK

OK OK

OK OK

OK OK

OK OK

pull out OK Discard

OK OK

OK OK

OK OK

75 — 91

Foolish

46 Oiled
42 Press —

Bare squeeze Edge OK

OK OK

OK OK

OK OK

OK OK

OK OK

Pullout OK — OK OK

Pullout OK — OK OK

OK OK

OK OK

pullout (Discard) OK

pullout OK — OK OK

58 — 83

Brush Rose

1080A. Press 41 - 1st Rosiny	A 2nd Press 42 1. Hula	B Hula Press 42	C 41 - Loodq
1 Specs both 3	OK OK	OK OK	OK OK
2 OK OK	Spot — 3 OK	OK one from 2	Com OK Edge 1/16
3 OK OK	OK OK	1 from Venus ok	OK OK
4 Com OK Venus	2 big spots OK 3	Com OK 2 sp	OK OK
5 OK OK	OK OK	specs 1 " 3	OK OK
6 Low Spot 3 OK OK	OK OK	specs OK 3	OK OK
7 Specs — 3 OK	small specs OK 3	OK OK	air phenomena sound fro air
8 bare spot 1/8 OK (3)	spot spot top 3	specs dulls 3 OK	OK OK
9 OK Low Spot 3	spot spot top 3	OK OK	OK OK
10 OK OK	OK OK	spots on lobes 3 OK	OK air allow air OK
11 OK OK	OK OK	Edge Dis OK	OK OK
12 Specs OK 3	specs OK 3		
50% (58)	50%	33	45

for 2nd Round of C see page back

all the discard yellow under micro on machine discard breaks them out

Varnish run out all over the round too much Var will make least 5 cc of this Var

for D Var see book 14 1107

1080 E

Hoffman ~~Ace~~

Make quart of following Varnishes —

A Reg Weld Var 4% Lampblack but make it 1½ para & 8½ 6/4 Mark A

B Quart Weld Var 3½ Lampblack 1½ para 8½ 6/4

C Quart 3% Lampblack 1½ para 8½ 6/4

quart 8½ 6/4 no Lampblack

D Well percent 24 Each Var -

C Note air cause of trouble in this round its different from other rounds of 1019 - Spots all over - round & at these points pull out one spot music thrown up without pull out

Apparently Nothing
in grafting
Blanks or polishing
or Buffing Moulds

1081 E

Press 41 - Having the 2 baffed Moulds

Edison Brushed 12 Varnish
blanks with graphite - used cloth
2 Coats,

pull out Dis Think I dug piece out with this
OK

OK
OK

OK
OK

pull outs OK
pull outs Discard. Not careful check

Pull outs
Pull outs OK
OK

OK
OK

pull outs OK
pull outs Discard

OK
OK

OK
OK

Pull out Discard
OK

Com OK Veneer
Veneer 1/16

OK
OK

58% 66%

Treatise

2nd Round Press 41

OK OK
OK OK
OK OK
Pull outs OK OK OK
OK OK
Veneer 1/4 Descend OK
OK OK
OK OK
OK OK
Com OK Edge 1/8
OK OK
Pull out OK OK OK

75 91%

Tootsie

1082 Moore Expt

1522 - 3 bakes then Edge Coat 3½ radius
or 7 inches, a-Chess is baked

Press 37.

Bare Spot near edge OK
pull outs near Edge OK
pull outs middle music OK
pull outs near end music OK
OK OK
OK OK
OK OK
pull outs pull outs near label
OK OK
OK OK
OK OK
pull outs " "

50% Recd load

2nd Round
Bare Spot ½ Near edge OK
Bare Spot. stout OK
Bare Spot Middle music OK
Bare spot at label OK
pull out OK pull outs descend
OK OK
Pull outs Dis OK
Bare spot ½ in pull outs
OK OK
OK OK
Com OK veneer 1/16
Low Moved 3-50
Bare Spot o/s

33%

See over

Round 2
2nd Round 1082E press 41
pull out to Dis
"
Bare spot Near label (OK OK)
Bare " End Mission
pull out Spec Dis
" "
(OK OK)
(OK OK)
(OK OK)
spec pull out Dis Not Buffed
"
pull out spec — bare spot Buffed
"
(OK OK)
spec pull out
"
pull out Dis
OK
(OK OK)

41% (50)
"

Joals 2

M.

1083 — 1522 —

1st Round Press 41

OK OK

1 side Postn 1

OK OK

1 side Psln 3

OK OK

1 side Psln 3

1 side " 3

OK OK

OK OK

OK OK

OK OK

OK OK

66%

Moore last of varnish
just the apparatus
gave 50% or 37%

Tootsie

2nd Round

42 press

OK OK

OK OK

1 side Postn 3

OK OK

OK OK

1 side postn 1

both side — " 3

OK OK

OK OK

OK OK

OK OK

OK OK

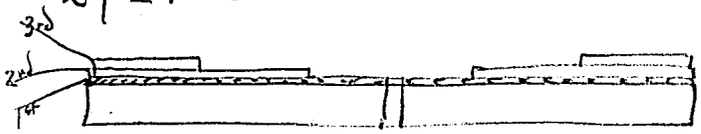
5 in position 3
2 in position 1

75%

Trick Rose

1083E

24 = 1522



3 Coats Varnish as above —

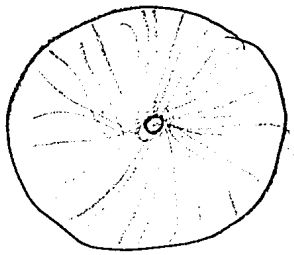
This looks like an improvement,
Think wants Enlarged
hole to give air vent

Made No Ear test
of Discards

1084 E

24 of 1522

Varnished radially —



1st Round

Press 42 - Load 3 -

1 OK OK
2 Snaps ~~OK~~ Snaps Dis
3 Snaps OK Dis too many
4 Snaps too many
5 Snap OK OK OK
6 OK OK
7 Snaps OK OK OK
8 Com OK - Edge 1/8
9 Term " Dis
10 Snaps Dis OK
11 OK OK
12 Com OK - veneer 1/8

41% 58%

Irish Rose.

2nd Round 1522 Lot 3

42 Press

1 OK OK
2 Snaps OK Discard
3 Snaps too many OK
4 OK OK
5 OK OK
6 OK OK
7 Snaps OK
8 OK OK
9 Com OK veneer 1/16
10 Com OK veneer 1/8
11 Lowepost OK
12 Com OK Edge 1/8

66 %

Tootsie

1085 E

~~Two~~ rounds 1522

Change the schedule on this lot this

Bring to Contact + put 200 lbs pressure on then put steam on + when temp gets to 200° deg put 850 lbs on for 12 minutes - Cool Cold

Dont appear to do any good -

1086

41 Press — 2nd Round — 1525 — blank

OK	Specs	3
OK	Spot	3
OK OK		
OK OK		
OK	Spec spot 1½	3
OK	Spec spot 1½	3
	Spec Spot 1½	3
	" " 1½	3
	Spec Spot ½	3
	" " 1"	3
OK	Spec spot	3
OK	Bare spot	3
	Spec Spot 1½	3
	" " 1½	3
OK OK		

25%

1st Round 41 press

Com OK	Edge ¼	
OK OK		
	Spec area 1¼	3
	" " 1¼	3
Com OK	Edge ¼	
	Spec area 1½	3
	" " 1½	3
OK OK		
OK OK		
OK	big spot it went some	3
	specs 2 press op	3
OK OK		
	Spec area 1½	3@2
	" " ½	3@2
OK OK		

58%

1086 E

Hoffman

Make 4 Rounds 48 blanks like 1085 E no hammers but instead of 600 lbs final pressure in big press only give them 500

These 1st 24" were hand

5.1 ¢c for 1st Coat
3.5 the other 2

This will be least 2

Press 39 — Extra load —
This is necessary 7 —
Run Reg —

OK OK

OK OK

pull outs · Discard
" "

pull out OK

OK OK

Com OK. veneer ½

OK OK

pull out OK

OK OK

5 7

85 ~~85~~ 5

1087E Moores Expt

Took 12 1522 blanks
Put at Contact needle off —
When 200° deg reached
Cut off steam — Cooled
down Cold — Took out
5 — The other 7 he
punched Reg again by
putting back in presses
The 5 were 3/4 punched
& came away from mould
surprisingly well although
Vac Not Condensed —
Blanks use were rejects
having spots on them

46 - Reg 1522 Not Oiled
Press 41 - Load 2

1 - Pullout OK (OK OK)
2 - (OK OK) Buffed Mounted
3 (OK OK)
4 pullouts Dis
5 pullouts Dis
6 (OK OK)
7 (OK OK)
8 Pullouts OK (OK OK)
9 (OK OK)
10 pullout OK (OK OK)
11 - pullout OK (OK OK)
12 Veneer discard OK Not Buffed

41% 75%

Jootoie

47 Reg 1522 -
Press 42 - Load 3

1 Edge Discard OK
2 (OK OK)
3 (OK OK)
4 pullout Discard OK
5 [Com OK] Edge 1/8
6 (OK OK)
7 (OK OK)
8 (OK OK)
9 pullout OK (OK OK)
10 pullout OK (OK OK)
11 [Com OK] veneer 1/8
12 [Com OK] veneer 1/16

66% 83%

Irish Rose

1088 41 press

Round 1

OK OK

OK OK

3 fine spots | op Test 3

4 group spots | op Sounds 3 3

5 group fine spots | not op – Beat

6 OK OK

7 Stained OK on smooth part OK OK

8 OK OK Edge 1/16

9 OK OK

10 group pull outs ok – shade 3 3

11 OK OK

12 OK OK Edge Diamond

66%

Foolsie.

1088

Press 42

Round 2

1 Spots group Spots few test 3 Sounds 2 – 2

2 OK OK

3 2 fine spots ok test OK OK 3

4 OK OK

5 OK OK Sounds

6 Spots group fine | op test 3 3

7 group spots fine | not op test 3 3

8 OK OK Sounds at end RO

9 OK OK

10 OK OK 9 sounds at End RO

11 Very fine group spots OK test 3

12 Very fine spots | op test 3 Sounds

58

50%

Foolsie

NOTE 5–17–16

1088 – This Technique is good + takes care of something + is mechanically correct.

Make 24 1522 blanks with Labels on – deliver to music Room – Only 1 Coals in hole 3 on other parts, Room touching hole deep so dont touch

Schedule Put at Contact ~~when~~ needle off pin – When temp reaches 175 put on 850 lbs for 12 minutes. Cool Cold –

NOTICE

This is an improvement as all the discards are groups of very fine pull outs Scarcely noticeable. This also mechanically right as it is not likely there will be Gave spots + large pull out

We must now get conditions where Van will anchor to blank so it will pull away from Moulds. The Label should be sunken into

OVER

Hereafter - Spec areas

No 1

No 2

No 3

Label

into blank at least .002 or .0025 not .001 -
We then can get label by using 2 Coats of Var,
We must get Var on 1st Coat to go in deeper -

48 Reg 1522
Press 42 Load 3

1 OK OK
2 Pullout Discard OK
3 OK OK
4 OK OK
5 pullouts OK OK OK
6 Pullouts Discard OK
7 Pullouts Discard OK
8 OK OK
9 OK OK
10 Com OK veneer 16
11 pullout Discard OK
pullout OK OK OK

50% 66%

Irish Rose

49th Round,
Press 41 -

1 Com OK Edge 3/16 -
2 specs bug area Dis - " Position 3
3 Spots " 3
Spots " 3
4 Com OK veneer 3/16
5 Spot - OK Position 3 OK OK
6 OK OK
7 OK OK
8 OK OK
9 - specs bug area Posin 3 OK OK
" small "
10 Specs OK " position 2 OK OK
11 OK OK
12 Snapes OK } Discard Position 3

50% 76

Footsie

50th Round

Press 41 Load 2

1 Low Spot Speed — posin 1

2 Spec Area ok — Pstn 2 Discard

3 Ferro Spot — Posin 1 " 3

4 Veneer ok — Discard

5 OK ok

6 Specs " — Posin 3 " 3

7 Specs ok — ok ok 2

8 OK ok

9 Snapo ok — Psn 2

10 OK ok

11 Snapo Snapo — Psn 3 Pstn 3

12 Snapo ok — " 3

25 33

Jalsie

51st Round

1 OK ok

2 OK ok

3 Long stroke Speed — Posin 3 " 1

4 Effects — " 3 " 3

5 OK ok

6 Specs Specs — posin 2 2 — OK ok

7 Specs " — 2@3 2@3

8 Specs " — 1st 1st — OK ok

9 Specs " — 2 3 — OK ok

10 OK ok — 3rd 3rd — OK ok

11 Specs Specs

12 OK ok

41 75%

Irish Rose

Hereafter will record only No flaws by Eye

No Coincidence in OKs & descards with same moulds –

Have stopped numbering moulds –

37 Rounds gives by Eye — 63.24%
Inspection by Ear gives 75.8

12.56% More. 18000 nets 11,376 Rounds
Ear nets 13,644
2268 Extra Records

52
Press 42

Lowapat OK 2nd Posln

OK OK
OK OK
OK OK
OK OK
OK OK

41%

Irish R

53rd Round Reg 1522
42 Press

OK OK
OK OK
OK OK
OK OK
OK OK

41%

Irish Rose

54	55 – 1522 L.1357
Poems 41	42 poems
OK	OK
X	X
OK	X
OK	OK
OK	X
OK	X
OK	X
X	X
OK	X
X	X
X	X
X	X
X	OK
	OK
50%	33%
Tolstoi	Frank Ross

2nd Round.

So just as Bad

from this it would seem that 180° was better

I notice the varnish stick to mould is red + transparent showing no lamp black -

Apparently it Cooks up + has very little hardener. + this may be the trouble,

1089 E

24 Reg 1522. 2 Rounds -

Put at contact needle just off pin - When temp gets up to 300° Fahr put pressure at 850 lbs for 12 minutes.

PHENOMENON

Every Record stick horribly to the Mould,

1 =	1/2 area both sides	
2	3/4 —	3/4 area
3	"	"
4	"	"
5	1/4	1/4
6	1/2	1/2
7	3/4	3/4
8	1/3	1/5
9	7/10	6/10
10	3/4	3/4
11	allowed	allowed

+ yet there is only 100 degrees difference

1st Round

Press 4#	Position
1 side	3
OK	
OK	
1 side —	3
1 side	1
1 side	3
OK	
1 side	3
OK	
1 side	3
1 side	3
1 side	3
OK	

41%

Not Eat tested

Irish Rose

~~Foolish~~

2nd Round

Press 4#	Position
2 sides	3 3
OK	
OK	
1 side	1 & 3
Corn OK Edge 1/8	
OK	
OK	
OK	
2 sides	3 3
OK	
OK	
OK	

45%

Irish Rose

1090 E

2 Rounds 1522

Schedule —

Put in Contact needle just off pin —

When temp gets 180° hold it between 180 & 200° for 3 min then put 850 lbs on for 12 min full steam — Cool Cold

This is as good as any

1091

Press 42 — Position

1 side — 3

OK OK

2 sides — 3, 3

OK OK

OK OK

OK OK

OK OK

OK OK

1 side - — 3

OK OK

1 side — 3

2 sides — 3, 3

58%

Finish Roll

2nd Round

42

OK OK

OK Bare spot 5/8 — 3

OK bad spot — 3

OK small specs 4 or 5 — 3

poor print of form — ½

OK OK

OK specs few - — 3

OK specs few - — 3

OK Big bare dull spot — 3

OK OK

bare spot — 3

" — 3

OK bare spot — 2

25%

1091 E

2 Rounds Specially Inspected Varnished Blanks —

Reg Schedule

Note -

in 30 or 40 Rounds

Top 6 of 12 Records on rack gave 120 thousands

Bottom 6 99 thousands

Bottom 6 is at top of Press -

1092 1st Round Press 41 Press	2nd Round Press
OK OK spot on label 3	
ok specs small 3	
ok specs 3	
ok specs 3	
OK OK	
ok spot 3	
OK OK	
OK OK	
ok specs 3	
Cracked blank 3	
specs ok	

11

36% -

1092 E

One

~~1~~ Rounds 1522

The holes of the blanks being ~~reamed~~ notched ~~[illegible]~~ larger

~~of~~ bushing center of blank reamed below surface

Req Schedule

1093

Press 41 —

1 side specs	3
1 " "	2
Bare spot	3
1 specs	3
1 bare	3
1 ok 1 2 specs	2
1 side 3 specs	1
OK OK	
1 side bare spot	3
1 " specs	3
1 side bare spot	2@3
1 " specs	3
1 side specs	2
1 side specs	1
1 side a fern	3
OK OK	

16%

Footsie

2nd Round
41 Press

	Pocket
OK OK	
both sides	3
1 side	3
OK OK	
1 side	3
OK OK	
2 sides bare	3 3
OK OK	
OK OK	
1 side	3
OK OK	
2 sides	3 3

50%

Footsie

1093.F

2 Rounds 1522

Change the schedule thus

Bring to Contact needle just off pin, put on steam + wheel temp Reaches 175° Fahr put on 850 lbs + hold for 12 min Cool Cold,

I am told the Vannished Blanks are Very badly Vannished

Some Very little Van at Edge + in little ways dabbed Chick

1093

Press 41 —

1 side spots	3
1 " "	2
Bare spot	3
1 spots	3
1 bare	3
1 ok 2 spots	2
1 side 3 spots	1
OK OK	
1 side bare spots	3
1 " spots	3
1 side bare spot	2@3
1 " spots	3
1 side spots	2
1 side spots	1
1 side a form	3
OK OK	

16%

Footsie

2nd Round
41 pieces

	Points
OK OK	
both sides	3
1 side	3
OK OK	
1 side	3
OK OK	
2 sides bare	3 3
OK OK	
OK OK	
1 side	3
OK OK	
2 sides	3 3

50%

Footsie

1093.F

2 Rounds 1522

Change the schedule thus

Bring to Contact needle just off pin, put on steam & wheel temp Reaches 175° Fahr put on 850 lbs & hold for 12 min Cool cold.

I am told the Vannished Blanks are very badly Vannished

Some very little Var at Edge & in little ways darkend Chick

1522 Blanks

	Posts
1 side	1
OK	
1 side	3
2 sides	1
OK	
2 sides	1
1 side	2
OK	
OK	
OK	
OK	
one side	3

50%

Load 6

1519 blank Rejected.

1 side = small	3
both sides	3
both sides	3
"	3
OK	
OK	
OK	
OK	
OK	
OK	
OK	
1 side - small	3
OK	

58%

Load 6

1094 E Moores Expmt

1522

Put in Contact needle off pin - When at 200° up to 850 lbs for 18 minutes, then Coal

Load 6

1095 Sesame on label as usual

Press 42 -

OK OK

OK OK

OK OK Bare spot touching label

OK OK

1 side OK
fermin 1 portion Spec 3 p

OK OK

OK OK

OK OK

1 side pp at end mine 3
ok

OK OK 1 - 2 shrinkin 1/16 x 1"
ok Dont hear it 1

OK OK Spec front lines of remove
ok Cant hear it

1 Bare spot 2
ok

58%

75

3 Round

Press 42 1095 2nd Round

OK OK

Bare Spot 3
ok

Spec small -
ok 1

Bare spot 1/2 3
ok

Spec - Spec 1-1
ok

OK OK

Spec Spot 3
ok

OK OK

Small 1/8 bare 3
ok

OK OK

Big bare Spot no print
ok dull on second
which has no
remove
label at after end

Bare Spot 3
ok

33%

3rd Round

1095 E

Ream out 2 Rounds of Vacuumated blanks so bushing in Mould will go down into it that touch the blank, to prevent Cooking

Reg Schedule

Notes

All Records fill perfectly

80% of discards are due to sticking to mandrel in large areas at End of music
There is only 2 Reasons for sticking —

1st The bushing + label + mat flattening blank flush at hole Keeps mandrel from touching record Some as much as .0115 - others less, This permits Cooking — E

2nd Cooking brings up shellac or wrong shellac, The 6/4 is diminished somehow —

5—17—16

Ordered Hoffman to stop using Hammers for loading 1522 blanks

5-17-16

1. Notes
Make round thin Var soaking it well in + bake, Dilute the Var by Alcohol 1/5 more by bulk soak well.

2 = Make some Var 12% 6/4

3 Try 4 rounds with fresh moulds

4 grafile bag knocking over mould

5 = Ventilated moulds

6 Jeff Kircher about bad Varnishing

7 Neutralize KOH on moulds by 1/10 th % HCl

8 - Varnish 24 starting at hole + going outwards

9 Hoffman try fine ground powder in your reagular Lubricator blank

10 Morris to use 2 or 3 pour slow cured moulds press at 850 Cold.
ditto 850 lbs Cold then steam for 12 min

1096 E

Hoffman

Special Var Thinner

Viscos of Req 1019 is

1 min 30 sec

This Var thinned by alcohol

& Viscosity made

1 min